NEWSLETTER

No. 99-13 OCT 99

CMTC ADLERS'

CSS TRAINING TEAM

Tactics, Techniques and Procedures for Combat Service Support

CENTER FOR ARMY LESSONS LEARNED (CALL)
U.S. ARMY TRAINING AND DOCTRINE COMMAND (TRADOC)
FORT LEAVENWORTH, KS 66027-1327

FOREWORD

The Adlers are the CSS Observer/Controller Team at the Combat Maneuver Training Center (CMTC). They developed this Newsletter to highlight current trends and offer TTP to help you prepare for combat and contingency operations during Home Station training.

It is an informal way to share successful TTP derived from real situations that the BLUFOR experiences during peacekeeping and combat operations conducted at CMTC. These operations create the best training environment short of war. The CMTC experience truly tests the CSS unit's METL, while testing the mettle of the officers and soldiers of these outstanding units under rigorous, demanding conditions.

The tips that the Adlers share with you on these pages are not doctrine. They are suggestions derived from observations collected over many rotations. They are intended to simplify the way you conduct your CSS business. Take the time to review these field-tested TTP. Decide if these suggestions and recommendations apply to your unit. Incorporate the ones that do into your training plan.

It is no secret. The key to success is Home Station training that complies with the maneuver commander's guidance for logistical support. This implies clearly defined areas of responsibility and established standards of performance: define the standard, communicate it, train the standard, and then enforce the standard.

It is now up to you. Training is and always has been the key to successful accomplishment of the mission. Time is one of the most precious assets we have today. Use it wisely. Be creative and innovative in your training philosophy. Be imaginative in executing your training plan. Train the way you are going to fight. Even though the world is changing, the Army's mission remains constant: to remain ready to fight our nation's wars. So train wisely. Train to win.

STEVEN A. BOURGEOIS
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ADLER 07

CMTC ADLERS' TTP FOR COMBAT SERVICE SUPPORT

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The Secretary of the Army has determined that the publication of this periodical is necessary in the transaction of the public business as required by law of the Department. Use of funds for printing this publication has been approved by Commander, U.S. Army Training and Doctrine Command, 1985, IAW AR 25-30.

Unless otherwise stated, whenever the masculine or feminine gender is used, both are intended.

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The intent of CALL publications is to share knowledge, support discussion, and impart lessons and information in an expeditious manner. This CALL publication is not a doctrinal product. The tactics, techniques, and procedures (TTP) observed and reported in this publication are written by soldiers for soldiers. If you have, or your unit has, identified other relevant TTP for the U.S. Army, contact the Managing Editor, Mr. Rick Bogdan, at Coml (913) 684-9581 or DSN 552-9581; FAX DSN 552-9583. E-mail address is: <bogdanr@leav-emh1.army.mil>. Articles must be submitted in either Word Perfect or Word format. Graphs, slides, and clipart must be submitted separately from the document in either ppt, pcx, or wpg format.

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Logistics Lessons from History

by COL Steven A. Bourgeois, ADLER 07

During a recent staff ride in Belgium, it became obvious that many of the logistics lessons learned during the Battle of the Bulge and the Army of 1944 are as relevant today as they were then. Our focus for the staff ride was the north shoulder of the Battle of the Bulge, or Kampfgruppe Pieper (KP), the 99th and 2nd Infantry Divisions, and the 393rd and 394th Infantry Regiments. These units and their actions in December of 1944 set the stage for our discussion of logistics of the time during the Battle of the Bulge.

As we trudged across the battlefields of Belgium, we learned about the heroics of some very brave soldiers. Soldiers that understood what it took to fight and win on that "high-intensity conflict" battlefield. One of the most important impressions we were all left with was that there are immutable truths in the Army. Ever wonder why Sun Tsu's ***Art of War*** is still read today? It is because the principles that undergird the art of war are as applicable today as they were hundreds of years ago. Technology may impact the application of the principles, but the principles are still as sound today as they were in previous battles.

The intent of this article is not to make you an expert on the Battle of the Bulge or the history of logistics. Rather, it is to highlight some of those immutable truths that have stood the test of time. Whether your unit is preparing for a CTC rotation or you are ramping up for a real world deployment, take a moment and digest these observations. The tactics, techniques and procedures that those soldiers followed so many years ago are still sound. They can spell the difference between success or failure on today's battlefields.

Here then are 10 lessons learned from history.

1. ***Point of injury care is the key to survival.*** History reports that only 33 soldiers out of 1,134 casualties suffered in the city of Bastogne died of wounds. The key to this incredible story was point of injury care provided by the medic. The task organization found in Infantry Regiments was very similar to what we find in today's Army. Each division had a medical battalion. This battalion was task organized into three medical line companies, or one company per regiment. Based on this task organization, each infantry battalion had somewhere between 30 and 40 medics per battalion. Doctors were normally found at the battalion or regimental aid stations. These stations were about 500 meters from the forward line of troops (FLOT). Unit litter teams were responsible for evacuating soldiers to the aid stations, sometimes carrying wounded up to four miles. Once at the aid station, the wounded soldier's chances were pretty good that he would survive. Quick aid and speedy evacuation are critical. The quicker we can treat a soldier at the point of injury the better chance of survival. Because of the speed and agility of today's mechanized forces, units will be far removed from the aid stations.

KEYS TO A LOW DIED-OF-WOUNDS RATE

- **Combat lifesaver training for soldiers.**
- **Forward position medics on the battlefield.**
- **Well-planned and executed MEDEVAC.**

2. ***Well-constructed fighting positions save soldier lives.*** In the early morning hours of 15 December 1944, the 393rd Infantry Regiment was subjected to an intense and overwhelming artillery barrage. The amazing thing is that they suffered only one death out of over 700 soldiers. WHY? Because they had well-constructed fighting

positions. Over time the American army also learned to build shelves in the fighting position to store equipment and protect it during indirect fire attacks. Logs for overhead cover, earthen burms, and parapets were all integral parts of a successful fighting position. On today's battlefield, the range and accuracy of indirect fire weapons have improved. Combat service support (CSS) units still present lucrative targets for enemy artillery and mortars.

THE BEST FORCE PROTECTION MEASURES TO SAFEGUARD CSS ASSETS AND PERSONNEL

- **Good dispersion of assets.**
- **Well-constructed fighting and survivability positions.**

3. ***Command and control (C2) of the rear fight is as important as C2 in any fight.*** Early in the Battle of the Bulge, there was a lack of a unified command to orchestrate the rear area fight. This resulted in many small unit separate fights, and also in a slow response and high POW rate for the Americans. American CSS units had never had to fight the rear area battle. C2 of the rear battle is a critical aspect of today's battlefield. Irregular forces, special operations forces, even bypassed elements or "leakers" from the main battle, are realistic threats to the soft-skinned CSS vehicles in the rear area. The ability to neutralize these threats in the rear will be critical to maintaining continuous support.

THE BOTTOM LINE: The forward support battalion (FSB) must be able to command and control the rear area fight in the brigade support area (BSA).

4. ***Situational awareness, a soldier's best friend.*** On the morning of 17 December, soldiers of B Battery, 285th Field Artillery Observation Battalion, were stopped at a hasty check point just south of the city of Malmedy. They were told that they should not proceed further because there were reports of enemy activity. Ignoring this advice, they proceeded down the road, were intercepted by the lead elements of Kampfgruppe Peiper, and were either killed in the initial contact or subsequently killed in what was to become known as the massacre at Malmedy. Situational awareness--knowing where the enemy is--remains just as critical to us today. It will become more so as we expand the division and brigade areas of responsibility. Corps throughput convoys, main support battalion (MSB) Class II/IV pushes, and logistical packages (LOGPACS) will become easy prey if they stumble into an enemy formation in the rear area. Solid intelligence summaries, accurate battle tracking by the S-3, and solid debriefings of just-arrived convoys help paint a picture that the S-2 can turn into pre-convoy intelligence briefings. All convoy commanders must be situationally aware of what is happening on the battlefield. Enemy infiltrations, bypass criteria of the forward combat forces, templating of enemy reconnaissance assets--all help to define the threat to logistics convoys in the rear area.

SITUATIONAL AWARENESS: Make sure the battalion S-2's intelligence briefing is an integral part of all pre-convoy inspections and preparations.

5. ***Employment of crew-served weapons is still important.*** During the early phases of the battle, individual bazooka crews were able to attrit Kampfgruppe Pieper's combat power. Later in the fight, well-trained bazooka crews were devastating at Elsenborne ridge against German armor. CSS units today still lack significant firepower, as they did in 1944, to fight the rear battle. Therefore, it is essential that units emplace what they do have in such a way as to get "the best bang for the buck." Even though we are improving mobility, CSS units remain less mobile than their combat arms counterparts. The requirement to withdraw under pressure remains an FSB mission essential task list (METL) task. The proper emplacement of all available crew-served firepower will be critical to

the accomplishment of this task. Just as in 1944, a well-placed and well-trained crew may disrupt an enemy advance just long enough to allow the relocation of critical and limited CSS assets.

TRAIN AND PROPERLY PLACE WEAPONS CREWS

Well-trained Mark 19 and M-2 crews may spell the difference between success and failure.

- **The FSB must be able to conduct a solid terrain analysis.**
- **Determine and cover the most likely avenues of approach.**
- **Train sufficient numbers of crews.**

6. ***Contractors on the battlefield are not new and are here to stay.*** Bare base contracting is a time-proven viable concept. Throughout 1944 the ability to move supplies forward was very strained. Allied bombings had severely damaged rail lines; critical Class IX parts were used to keep the Red Ball express running. Wheeled transportation was literally at the breaking point. The bottom line was that to fill the need, the First Army established numerous local contracts to provide goods and services to keep the combat force running. Two hundred tank engines were rebuilt at the Gnome-Rhone plant in Paris. Other local Paris contracts included tanker helmets and oxygen/acetylene. As the forces moved into Belgium, First Army established production contracts for small arms and artillery parts and tire recapping. The logjam in getting repair parts to the front required the use of local contracts. The need for massive amounts of supplies, equipment, and services to maintain an Army in the field will require some sort of local procurement capability. Even though finding M-1 rebuild facilities is extremely remote, more conventional capabilities will be required.

AS WE MOVE TO A DISTRIBUTION SUPPLY SYSTEM, THERE WILL BE A NEED TO QUICKLY ACQUIRE PARTS FROM THE LOCAL ECONOMY.

7. ***Large stockpiles of supplies on the battlefield are a thing of the past.*** The Army of the 21st century will be a highly mobile force that covers a lot of ground. Stockpiles of supplies, as was seen in the city of Malmedy, will be too cumbersome to support that force. This will cause distribution of supplies to become the long pole in the tent for the Army. Malmedy is a classic example of why the Army is going to a distribution-based system. Ammunition, Class VII, and Class III were all stockpiled in supply depots operated by the Ordnance Corps. Had Kampfgruppe Pieper turned north through Malmedy instead of heading west, it would have stumbled upon a significant portion of the First Army's CSS stockpiles. In one ammunition supply point (ASP) alone, the 57th Ordnance Company destroyed over 200 tons of ammunition that could not be retrograded. The speed of the penetration and the inability of the rear echelon troop to halt the advance highlight just how vulnerable supplies are when located on the ground. As today's Army becomes leaner and moves away from the iron mountain or brute force logistics, it must become very adept at making the distribution system work.

AUTOMATION: A distribution-based supply system increases the importance of moving the electrons that:

- **Identify the need.**
- **Track the assets to the final destination.**
- **Secure our main supply routes (MSRs).**

8. ***Intelligence preparation of the battlefield (IPB) and BSA location are still critical tasks for protecting the force.*** German artillery targeted major supply points at Malmedy, Versiers, and St. Vith to begin the attack. The same tactic can be expected on today's battlefield. CSS units make great targets--soft-skinned vehicles with supplies such as Class V and fuel that go "boom" in the night.

BSA LOCATION: Determining the indirect fire threat to the BSA is essential to deciding where to locate the BSA.

- **Templating enemy field artillery positions.**
- **Accurate battle tracking.**

9. ***MSRs remain the Achilles heal of a task force.*** As the Army moves to a distribution-based supply system, the MSR becomes an even more critical lifeline for the combat task force. Both the 2nd ID and the 99th ID learned this during the opening days of the Battle of the Bulge. As they attacked northeast to the Roer Dams, they both relied on a single MSR for supplies. Within hours of the opening salvos, this MSR was at risk, causing both divisions to stop the attack and reposition forces into their rear areas to protect their supply lifeline.

MSR PLANNING: Make sure there are primary and alternate MSRs to the BSA and from the BSA to the task force (TF) combat trains areas.

10. ***Military vans (MILVANS) and palletized loading system (PLS) flat racks are the 5-gallon gas cans for the year 2000.*** During the fall of 1944 the method of distributing fuel was through the use of 5-gallon fuel cans. The Army did not have heavy expanded mobility tactical truck (HEMTT) fuelers and 7,500-gallon tankers. The combat forces would refuel, then throw the 5-gallon cans to the side of the road. The shortage for these gas cans became so acute that the Army offered a small reward to civilians who turned them into the supply units. Today we use MILVANS and PLS flat racks to get supplies forward. MILVANS make great storage areas, offices, and guard tower bases. Flat racks make great floors and above-ground storage areas. The problem is that as they get consumed and they are not available to transport supplies. We then run into the same problem that the Army of 1944 did--plenty of supplies but no capability to get them forward.

TRACK MILVANS AND FLATRACKS: Keeping track of these assets is a critical task for the support operations section. It is absolutely essential to keep the distribution system running.

We can learn a lot from history. A great scholar once said, "Those who cannot remember the past are condemned to repeat it."[1] That remains true today. The cost of learning these lessons during World War II was high. It would be shameful to have to pay the price again to learn the same lessons. Don't doom your unit to repeat history.✪

[1]George Santayana (1863-1952), ***Life of Reason,*** "Reason in Common Sense," Chapter 12 (1905-6).

Sergeant of the Guard: Security, Supervision, and Safety

by MSG W. Joe Horn, FSB Sergeant Major O/C

The Sergeant of the Guard is the senior noncommissioned officer of the guard. He supervises the guard and ensures that all safety regulations are observed.

Proper protection of troops and equipment in the field is essential to maintaining a secure and safe perimeter that enables mission accomplishment. When planning for the protection of troops and equipment in the field, the first and most important duty that should come to mind is guard duty. The first position that should be considered is the Sergeant of the Guard. Observations of fire support battalions in training indicate that leaders tend to neglect the vital role that the Sergeant of the Guard plays in a prepared defensive posture.

Current Trends:

- Soldiers are not posted to guard duty by the Sergeant of the Guard.
- Soldiers do not receive special orders prior to being posted for guard duty.
- Soldiers are not aware of their responsibilities while on guard duty.
- Soldiers manning the .50-cal position are not qualified and/or familiarized with the .50-cal (familiarization is a minimum requirement).

Walk up to a gate guard training in the field and ask, "Who put you here?" The answer will always be different. It most likely will never be, "The Sergeant of the Guard." Next, ask the soldier standing on guard duty, "What are your responsibilities, orders, and duties?" The answer to this question will normally be followed by a reference to the challenge and password. Now ask the soldier whom he or she would call if a person approaching the gate does not know the password. The response will normally be, "Anyone who will answer."

The .50-cal (M-2) is normally situated at the front gate. Most soldiers assigned to this weapon have never fired a .50-cal. In fact, the average soldier assigned to this weapon has never even been familiarized with its operating procedures. When a guard assigned to the .50-cal is asked to check the head, space, and timing on the weapon, the response is most often silence, confusion, and frustration. Look closely at the .50-cal itself and you are likely to see that there is no head, space, and timing key on the weapon!

The Basics. Guards have three general orders. These are supplemented by special orders given to them by the Sergeant of the Guard. Special orders vary from one guard post to another. Each guard should know his general and special orders.

General Orders:

1. "I will guard everything within the limits of my post and quit my post only when properly relieved."

- Exact limits of the guard's post are defined in the special orders.
- If a suspicious or unusual situation arises, if a guard suffers an illness, or if the relief is late, the guard must contact the Sergeant of the Guard for instructions. (Communication lines between the guard and the Sergeant of the Guard must remain open.)

2. "I will obey my special orders and perform all of my duties in a military manner."

- The Sergeant of the Guard must ensure that all guards understand and properly perform their orders and duties.
- The Sergeant of the Guard is responsible for clarifying any doubt as to the meaning of the special orders.
- The Sergeant of the Guard questions all members of the guard about the instructions they receive.
- The Sergeant of the Guard is responsible for the conduct of the guard.

3. "I will report all violations of my special orders, emergencies, and anything not covered in my instructions to the commander of the relief."

- The Sergeant of the Guard is responsible for establishing and maintaining constant and adequate communication with the guards on duty.

The purpose of the guard detail in the field is to protect a unit from the element of surprise. The conduct and action of the guard and the role of the Sergeant of the Guard in the field are limited only by the instructions of the commander. It is imperative that the Sergeant of the Guard knows his basic responsibilities and uses his initiative to guarantee proper protection of troops and equipment. The responsibilities of the Sergeant of the Guard should be explicitly and clearly defined in the tactical standing operating procedures (TAC SOP).

Responsibilities of the Sergeant of the Guard:

- Ensures that equipment of the guard is properly cared for.
- Ensures that all reliefs are posted at the proper time.
- Is readily available for the guards on duty.
- Keeps communication with the guards flowing.
- Informs guards of their duties and orders.
- Is responsible for the conduct of the guard.
- Ensures guards are qualified with their individual weapons and are familiarized with any other required weapons.

Security Issues:

Leaders need to pay more attention to security issues in the planning stages of deployment. They need to answer the following questions:

- "Are the soldiers qualified on their individual weapons and familiarized with the functions and safety regulations of all weapons they could be assigned?"
- "What is the Sergeant of the Guard's role?"
- "Will the guards have adequate communication in case of an emergency?"
- "Will the troops and equipment be protected from and prepared for any situation?"

It is impossible to foresee and plan for all possible situations. Units must rely on their security personnel to apply sound judgment. The judgement is based on a combination of common sense, proper and thorough training, and decisive initiative.✪

TACTICAL OPERATION CENTERS: The Nerve Cell of an Organization

by CPT Fredrick J. Hannah

An O/C shares his experiences and documented observations on the set-up and start-up of a tactical operations center (TOC), its functions, and the duties and responsibilities of TOC personnel.

From high-intensity conflicts (HIC) to garrison operations, the tactical operations center (TOC) is the nerve cell of an organization at any level. Tactical operation centers have an immense amount of responsibility to their commanders and organizations. Effective TOCs afford commanders the greatest likelihood of making the "***right decision***" to counter enemy efforts. Inadequate TOCs too often lead to "***decisions***" that leave the organization vulnerable.

Unfortunately, there is not a single doctrinal manual currently published that can assist organizations in establishing a TOC. **FC 71-6,** ***Battalion and Brigade Command and Control,*** Mar 85, detailed the role and functions of the TOC and its personnel, but it is no longer published. There may be a few remaining copies of FC 71-6 within the Army's inventory; each S3 is urged to obtain a copy if possible.

TOC Establishment

There are many variations of TOC configurations within the Army. Each one is designed to fit the commander of the organization. Unfortunately, very few commanders are present when their TOCs are established. When commanders arrive, they often find that the TOC does not provide them with the necessary elements for command and control of their subordinate units. They also discover that the current set-up does not provide the means to make decisions. There are several contributing factors:

- **Standing operating procedures (SOP) inadequate (or no SOP at all).**
- **Inexperienced operations officers (normally a senior 1LT or junior captain).**
- **Lack of assigned roles and responsibilities.**
- **Undefined priorities of work.**
- **Lack of field grade officer involvement.**

These shortfalls are not insurmountable if staff sections communicate and clearly understand the commander's intent, the unit's mission, and their own roles.

The rapid establishment of the TOC is paramount in any operation. It is the nucleus of the organization. It takes more than just pulling the vans into a location or erecting a tent. The vans and tents are nothing more than the shell of a TOC. Incorporating the following elements enables the vans and tents (infrastructures) to become a TOC:

- **Security**
  - **Disguise the TOC so that it is not obvious to the enemy.**
  - **Establish a viable force to protect the TOC.**
  - **Set up obstacles that detour the enemy and limit access to the TOC.**
  - **Enforce operations security (OPSEC).**

- **Communications**
  - **Establish and maintain redundant communications with both higher and subordinate units.**

- **Personnel**
  - **Essential personnel with assigned duties and responsibilities are critical to an effective TOC.**
  - **Fewer personnel hovering around the map boards make more efficient and effective TOCs.**

- **Map Boards**
  - **Commanders must be able to see the maps within their TOCs to ascertain what is going on in the deep, close, and rear battles.**

- **TOC Charts**
  - **NO PowerPoint Rangers!!!**
  - **Basic charts.**
  - **Clearly portray critical information which the commander needs.**
  - **Every person serving within the TOC must be able to update the charts.**

- **Functionality**
  - **Establish and maintain a systematic way of functioning.**
  - **Establish a system for collecting, packaging, and disseminating information.**
  - **Assign a TOC policeman (usually the NCOIC).**
    - ✦ **Ensure the TOC maintains a level of cleanliness.**
    - ✦ **Prevent the TOC from becoming a gathering place prior to scheduled meetings/briefings.**

(Refer to "TIC TOCs: TOCs that Run Like Clockwork" in the *CALL CTC Quarterly Bulletin,* 1st Qtr, No. 97-20, Dec 97.)

By now you know how to establish a tactical operations center. But setting up a TOC -- as crucial as it may be -- is only the beginning.

TOC Functions

Too often TOC personnel tend to relax after the TOC is set up (infrastructure with all required accessories). On the contrary, this should be the time for TOC personnel to turn their attention to TOC start-up. Most FSB TOCs experience difficulties in start-up. In fact, the most predominant trends in FSB TOCs are the lack of understanding of the functions of a TOC and the inability of TOC personnel to apply those functions. The six basic TOC functions are:

- √ **Receive Information**
- √ **Distribute Information**
- √ **Analyze Information**
- √ **Submit Recommendations**
- √ **Integrate Resources**
- √ **Synchronize Resources**

These functions maximize an operation officer's ability to provide the commander with accurate and essential information. They apply well beyond the walls of the TOC. Remember, the TOC is responsible for:

- Ensuring that its area of responsibility (AOR) is well defended (integrating all units operating within the AOR).
- Ensuring that all subordinate units have the most accurate information.
- Developing and implementing a reconnaissance and surveillance plan.
- Continually tracking the deep, close, and rear battles.
- Working through the military decision-making process (MDMP).

Duties and Responsibilities

The most efficient and effective TOCs are those that operate with the minimum amount of personnel. Listed below are the key personnel required in operating and maintaining a TOC:

- **Executive Officer** -- Responsible for synchronizing and coordinating the efforts of the staff sections during all phases of the operation.

- **Battle Captain** -- The role is similar to that of the XO in synchronizing and coordinating the efforts of the staff sections. Most important role is tracking the deep, close, and rear battles, and providing the commander all the necessary information to make a decision.

- **Operations NCO/Shift NCO** -- normally is the most underused individual within the TOC.
  - Typically assigned the duties of providing logistics support, movement, and security of the TOC. These are important tasks, but do not require the total commitment of the TOC senior NCO.
  - The TOC would benefit more by using the senior NCO in the role of receiving and disseminating information, updating TOC charts and maps, supervising the publication of orders, and assisting in the MDMP.

- **Radio Telephone Operators (RTOs)** -- critical to a TOC. Can be the TOC's greatest asset when used properly. Use the RTO to assist in updating TOC charts, publishing orders, and battle tracking, and to maintain the significant events and activities log.

This list of personnel and duties is not all inclusive. Use it as a framework for delegating duties and responsibilities to attain an efficient and effective TOC with minimum personnel.

Conclusion

This article outlines the basic functions, duties, and responsibilities of TOC personnel. It covers how to set up and start up the TOC. Apply these basic guidelines and you will operate and maintain an efficient and effective TOC during all tactical operations.✪

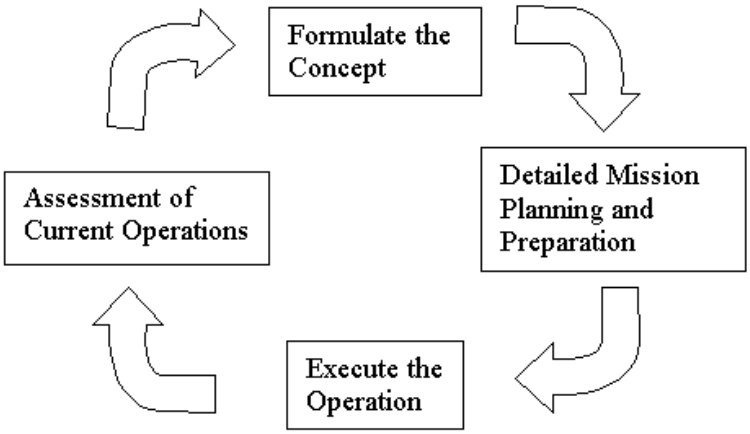
Asset Tracking: The SPO Needs to Know
Providing *responsive and continuous* support
by MAJ Clay W. Mitchell

Too often support operations officers (SPOs) realize there is a problem long after the window of opportunity to correct it is closed. Many times the problem is brought up in the tenant meeting hours later.

The result? A knee-jerk reaction. SPOs are forced to improvise.

Tracking the execution of logistics efforts in the brigade area continues to present a significant challenge to SPOs at Combat Training Centers (CTCs). Too often SPOs fall into the trap of believing their great concepts of support will happen without a system for continuous monitoring. WRONG! The support operations section must have continuous feedback on logistic mission accomplishment, regardless of success or failure.

FM 100-5, *Operations,* establishes the five logistics characteristics as *anticipation, integration, responsiveness, continuity,* and *improvisation. Responsiveness* and *continuity* should be the forward support battalion SPO's primary focus at the CTCs. Students at CGSC learn that the *concept, planning or preparation, execution, and assessment (CPEA) methodology* is a principal method of executing the combat decision-making process. If this methodology is executed to standard, we can apply all of the logistics characteristics, especially *responsiveness* and *continuity*.



√ **Concept Formulation.** We routinely see outstanding concepts of support at CTCs. SPOs have done their homework and bring an executable concept into the training.

√ **Detailed Planning and Preparation** is above average. We often see plans that include great detail. Units are prepared and well rehearsed. Normally, commanders say they have reached the 70-percent solution.

√ **Execution of the Operation** and all its subtasks is usually done to standard. If the standards are articulated, the mission is usually accomplished.

√ **Assessment of Current Operations** needs work. SPOs should focus more on assessment. It was mentioned earlier that the mission is *usually* accomplished to standard. What if it is not? How do SPOs *respond?* How do SPOs ensure there is *continuous* support?

Assessment is a continuous process. If SPOs do not make accurate assessments of the execution, the follow-on concept and planning process will be out of synch, and they will be sorting out problems which happened days ago that affect the next day's operation.

EXAMPLE: A morning conversation in the SPO van:

SPO -- "Good morning, any problems last night?"
Night SPO rep -- "Yes sir, we'll be amber in fuel at LD."
SPO -- "How can that be? We had 12K being pushed out by corps at 2400."
Night SPO rep -- "Yes sir, it made it fine, but TF Steel didn't arrive to draw fuel until 0200."
SPO -- "But I had them scheduled to draw fuel at 2200."
Night SPO rep -- "Yes sir, but they didn't get back from LOGPAC until real late."
SPO -- "Did they have problems returning to the BSA?"
Night SPO rep -- "No sir, they got back fine, but they left the BSA about four hours late going to the LOGPAC."
SPO -- "So let me get this straight. The BCT is amber in fuel because of a convoy delay that happened over 12 hours ago and we didn't know until just now? We could have made some adjustments. Why didn't someone tell us?
Night SPO rep -- "Well sir, we never asked."

FACTS OF LIFE - CTC SUPPORT STYLE

1. SPOs who **assume** that critical support missions happen because they planned them and **hope that** all missions were accomplished have a long, painful training experience.

2. SPOs who **establish a tracking system** for critical information have the situational awareness needed to *respond* to potential shortfalls and have an enjoyable training experience.

TECHNIQUE: The SPO must articulate to both the team members who execute his plans and to his customers what information he needs and when. Those soldiers will be happy to tell you what you need to know. Simply make it the standard for them to tell

Following are a few questions the SPO needs to ask to coordinate CSS operations in accordance with ARTEP 63-005, Collective Task 63-1-0015:

√ Is the supply platoon ready to receive the Class III, V, or I push at the time stated in the order?
√ Did the Class III, V, or I push arrive as scheduled by DISCOM? Did it have the correct amount and type of supplies?
√ Are the customers at the correct location, with the correct personnel and equipment, at the time stated in the order?

√ Did the customers leave the supply point with what they needed?
√ Did the material handling equipment (MHE) (with operator) link-up with the engineer representative at the correct time and place?
√ Is the mass casualty (MASCAL) team linked up with the ambulance platoon leader?
√ Is the ambulance exchange point (AXP) established at the time and place stated in the order?
√ Did the logistics package (LOGPAC) SP on time?
√ Did the engine make it to the unit maintenance collection point (UMCP)?
√ Did the tank that was supposed to become fully mission capable no later than 0500 actually become operational?
√ Did all the unit level logistics system (ULLS) daily inoperable disks get turned in to the shop office on time?
√ Did all the ULLS supply disks get turned in to the transportation supply officer (TSO)?
√ Did your customers pick up all their parts from the Class IX point? (Even those pesky 12 priority parts?)

This is not to say that every time a supply platoon truck starts or a status disk gets is received the SPO needs to know about it. However, many changes to those detailed support orders have a ripple effect, and the SPO needs to know about them as soon as possible.

TECHNIQUES:

- Designate a SPO battle NCO to check items from the execution matrix.
- Establish "SPO commander's critical information requirements (CCIR)" in the order.
- Create bubble charts that provide a daily update on missions executed to standard.
- Provide mission execution checklists in the TACSOP that outline what events must be called in to the SPO.

The best technique uses a combination of all of the above. Decide what information you need and develop a system with standards that all concerned will know and can execute.

Obviously, these are just a few examples of the information required by the SPO, as well as techniques to retrieve the information. Unfortunately, SPOs do not often get these simple, yet important pieces of information. Combat arms personnel know if the platoon crossed the line of departure (LD) at the right time or if the mortars shot their critical fire support task. Why can't SPOs track critical support tasks? LD is a lousy time to find out that yesterday's Class V push was short 1,000 mortar rounds.✪

Area Damage Control

"Hey FSB S1/S4! Do you know what ADC is? If not, you're missing the boat!"

by MAJ James Fly

Shouts of "INCOMING!" rang across the perimeter as the first of fifteen 82mm mortar rounds impacted the BSA right near the Supply Company. A fuel fire broke out as one of the 5,000-gallon fuel tankers was hit. A wave of fire moved rapidly downhill from the burning tanker. It ignited two sleeping tents and threatened to consume an additional tanker in its path.

As the soldiers of A Company frantically moved to combat the fire with whatever tools they could find, things got even worse. Small arms fire erupted from the enemy side of the company's protective wire. It was directed at those soldiers attempting to fight the fire. Two soldiers were immediately wounded. A few more stray rounds flew across the perimeter. Soon it was over. The enemy completed its mission of disrupting CSS activities for the day. It departed the perimeter without a scratch.

Shortly before the attack began, SPC Jones from B Company departed the CP to deliver the morning report to the Battalion TOC and then go on a shower run. She now lies wounded and unconscious in the dense brush where she attempted to seek cover from the indirect fire.

SITREP

- Each BSA tenant unit conducted sweeps of its area without finding any additional casualties.

- Despite the best efforts of A Company soldiers, the fuel fire continued to burn for the remainder of the day. By 1600 the fire had claimed five of the battalion's eleven 5,000-gallon fuel tankers, two day's supply of class I rations for the brigade combat team, and more than $1 million worth of Class IX parts.

- Additionally, 5 soldiers from A Company had to be evacuated for third degree burns, and 30 soldiers suffered from smoke inhalation.

- At 2300 that day, as the exhausted soldiers from A Company moved to HHD to pick up a well-deserved evening meal, they discovered SPC Jones's lifeless body.

The unnecessary loss of soldiers, mission support time, and key support equipment invariably pay the bill for failing to implement effective area damage control (ADC) procedures in the BSA. If the BSA had incorporated proper ADC procedures in their planning, the loss of SPC Jones's life, and lost mission support time, fuel tankers, and supplies could have been avoided.

Area Damage Control (ADC) is measures taken before, during, and after hostile action, or natural or man-made disasters, to reduce the probability of damage and minimize its effects (**FM 101-5-1, *Operational Terms and Graphics***). Effective implementation of ADC procedures will prevent loss of equipment and lives in a combat environment. This article will briefly discuss ADC as it relates to the BSA and will suggest tactics, techniques and procedures (TTPs) for use by an FSB.

THREATS

During and just prior to the Battle of the Bulge, the U.S. Army experienced an enemy's first use of weapons of mass destruction on rear area facilities. The Germans attempted to destroy the port of Antwerp with V-1 and V-2 rockets.[1] Since then, threats to the rear area have increased with the development of weapons of increased lethality. In the late 1950's, for example, the Army expected to face a potential nuclear threat. This resulted in increased dispersion of CSS assets across the Army's rear areas.

Increased dispersion reduced the threat from weapons of mass destruction, but it increased rear area vulnerability to the threat posed by small guerrilla units (such as what the Army experienced in Vietnam).[2] The enemy quickly learned that it could efficiently disrupt tactical operations by cutting off the maneuver unit's source of supplies. Force XXI and LCDXXI initiatives, such as inventory in motion and the increased frontage prescribed in the new heavy division concepts,[3] suggest even further increased dispersion of CSS assets within the division's area of operations.

BOTTOM LINE: BSA assets are becoming increasingly more of a high-payoff target for enemy forces. We should expect the enemy to conduct operations in the brigade rear area to disrupt CSS operations. Proper ADC measures will limit the damage posed by these threats and allow units to quickly resume CSS

RESPONSIBILITIES

- The FSB battalion commander is responsible for everything within the BSA. As the brigade commander's designated commander for the BSA (FM 71-123, Appendix D), the FSB commander is responsible for providing effective ADC after an attack.

- The FSB battalion executive officer (XO) is responsible for synchronizing staff planning for all BSA missions as part of the military decision-making process IAW FM 101-5 (see ARTEP 63-005-MTP, Collective Task 63-1-0025, Plan Rear Operations). The XO should ensure that ADC considerations are incorporated into every BSA planning process.

- The FSB S4 is responsible for planning, coordination, and command and control (C2) during execution of ADC (see ARTEP 63-005-MTP, Collective Task 63-1-0025, Plan Rear Operations, and Collective Task 63-1-0028, Direct ADC Operations).

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[1] Owens, ***Military Review,*** May 1959.

[2] Heiser, ***A Soldier Supporting Soldiers,*** Center of Military History, U.S. Army, 1991, pp.127-167.

[3] ***FORCE XXI Division Concept for Combat Service Support Operations,*** 15 May 1998.

- The FSB S1 is responsible for planning and coordinating BSA casualty reporting and evacuation (see ARTEP 63-005-MTP, Collective Task 63-1-0021, Provide Personnel Service Support).
- The FSB S2/S3 is responsible for creating the Rear Operations Annex to all battalion orders (see ARTEP 63-005-MTP, Collective Task 63-1-0025, Plan Rear Operations).

TECHNIQUE: Coordinate!

1. The S4 must coordinate with the S2/S3 to ensure all BSA missions and plans incorporate ADC considerations.

2. Tenant unit company commanders must coordinate to successfully plan and execute ADC within their assigned areas or base clusters (see Collective Tasks Plan Area Damage Control and Perform Area Damage Control in ARTEP 43-009-30-MTP, ARTEP 8-058-30-MTP, and ARTEP 63-146-30-MTP).

3. First-line leaders and soldiers must coordinate their efforts to execute ADC functions at their level to minimize the effects of an attack on the BSA.

NOTE: Even though the FSB mission training plan (MTP) designates the S4 as the point man, all leaders and soldiers in the BSA are responsible for ADC at their level.

PLANNING

Actions Before

According to ARTEP 63-005-MTP (and appropriate company level MTPs), the S4 and company commanders plan ADC functions for each assigned mission. The purpose is to preserve CSS assets and personnel following an attack or natural disaster.

TECHNIQUES: Proper ADC planning should consider the following steps:

1. Identify key ADC tasks -- Casualty evacuation (CASEVAC), operational decontamination, patient decontamination, fire fighting, hardening of critical facilities and activities, command and control of ADC assets, movement and crowd control.

2. Designate individuals and units to perform specific ADC tasks -- nonstandard evacuation assets, details, control and assessment teams.

3. Organize, equip, and train personnel and units -- incorporate into FSB SOP, precombat inspections of ADC equipment, train prior to deployment, rehearse once deployed.

4. Establish ADC priorities -- S4 coordinates with SPO to determine critical assets, FSB commander's guidance.

5. Prepare, coordinate and rehearse -- See Appendix G, FM 101-5, for a doctrinal standard on conducting rehearsals.

6. Designate alternate operating sites and alert areas -- casualty collection points, rally points for ADC assets and teams, alternate locations for movement of critical assets (5,000-gallon fuel tankers).

7. Continually reassess plan and make improvements -- S4 walks the ground to ensure compliance and reassesses current plan; adjusts plan to accommodate new units, equipment, or activities in BSA.

8. Coordinate with Civil Affairs (CA) to gain and maintain civilian support -- fire fighting assets, civilian hospitals, earth-moving equipment, refugee crowd and traffic control.

The results of this analysis are the ADC requirements for the mission. The S4 must coordinate with the S2/S3 to ensure that the ADC is incorporated into the rear operations plan. Staff products could include an ADC appendix to the Rear Operations Annex of the battalion Operations Order (OPORD) and updates to the battalion tactical SOP.

Actions During And After

The FSB's control and assessment command post (CACP) guides the S4's deployment of ADC assets in response to a catastrophic event in the BSA. No doctrinal reference currently details how this command post should be configured; however, **FM 71-123, *Armored Brigade,*** "Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task force, and Company/Team," provides a doctrinal reference for the layout of the battalion field trains command post (FTCP). This document is a good example of how the CACP should be configured.

TECHNIQUE: Configure the CACP to provide C2 to ADC assets so that they can effectively perform the following functions during and after a catastrophic event occurs in the BSA (see ARTEP 63-005-MTP, Collective Task 63-1-0028, Direct ADC Operations).

1. Assess and isolate damage -- Control and assessment teams (CATs) conduct sweeps of the entire BSA to assess and isolate damage and identify and treat and evacuate casualties. (Tenant units conduct sweeps of their assigned areas and report equipment damage and casualties to the CACP.)

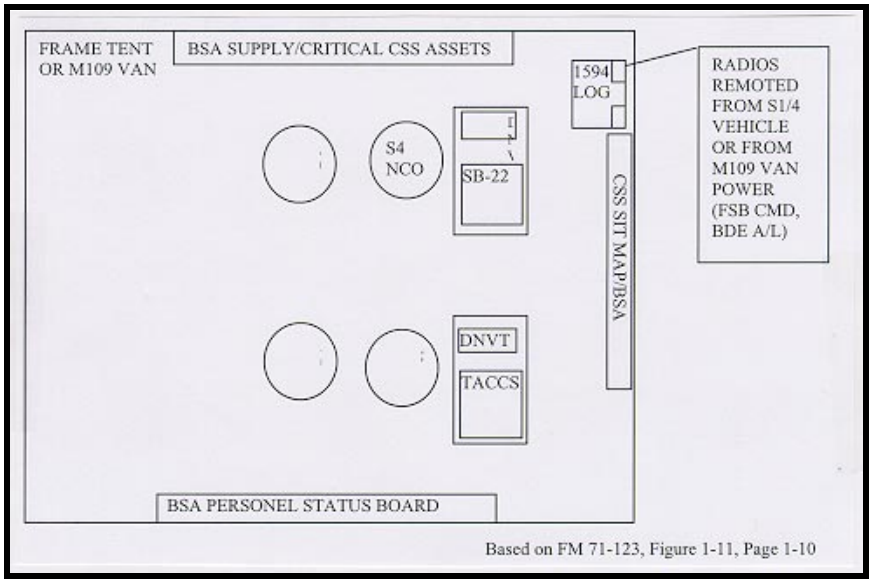
2. Prevent fires (bunkering, isolation) -- S4 dispatches additional fire-fighting teams and earth-moving equipment to fight and control fires.

3. Administer first aid and evacuate casualties -- S4/S1 dispatches additional litter teams and evacuation assets to assist in the evacuation of casualties to appropriate treatment facilities.

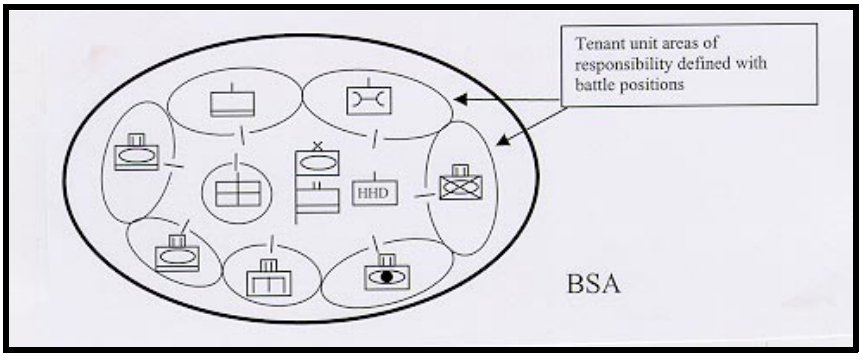
4. Use MPs to assist in controlling flow of ADC assets -- S4/S2/S3 directs deployment of Military Police to provide traffic control (to include controlling access of "dirty" MSRs/ASRs and movement of contaminated personnel and equipment to decontamination points).

5. Request assistance from higher as required (EOD, host nation, DECON) -- S1/S4 reports losses of equipment and personnel to brigade and DISCOM and requests support for damage in excess of the BSA's capabilities to control.

Communications for the CACP will normally be by land line and digital nonsecure voice telephone. The FSB TOC usually requires the FM communications for command and control of the perimeter defense during and after an attack. A suggested layout for a CACP is detailed in the figure below:

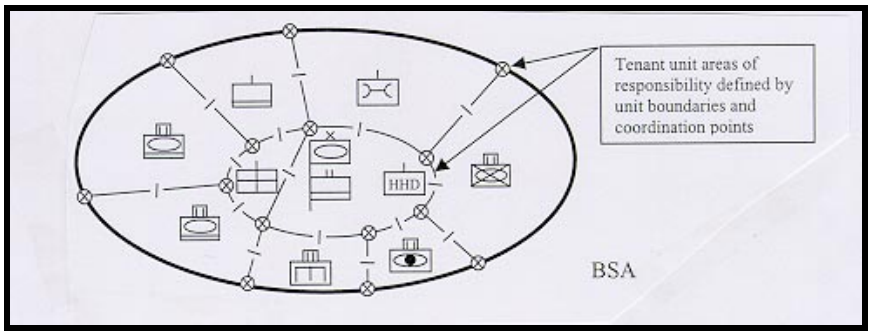


TECHNIQUE: Incorporate control measures into the battalion CSS and maneuver overlays to improve the CACP's ability to provide C2 during execution. Typical BSA graphics detail the location of tenant units in a BSA as battle positions. Unfortunately, battle positions do not define the depth of the area of responsibility for each tenant unit in the BSA (see below):



Tenant units often conduct sweeps during the execution of ADC operations. They report their areas clear of damage to personnel and equipment, but often do not actually know the depth of their AOR.

TECHNIQUE: Units should use unit boundaries to better define the area of responsibility for BSA tenant units as shown below:

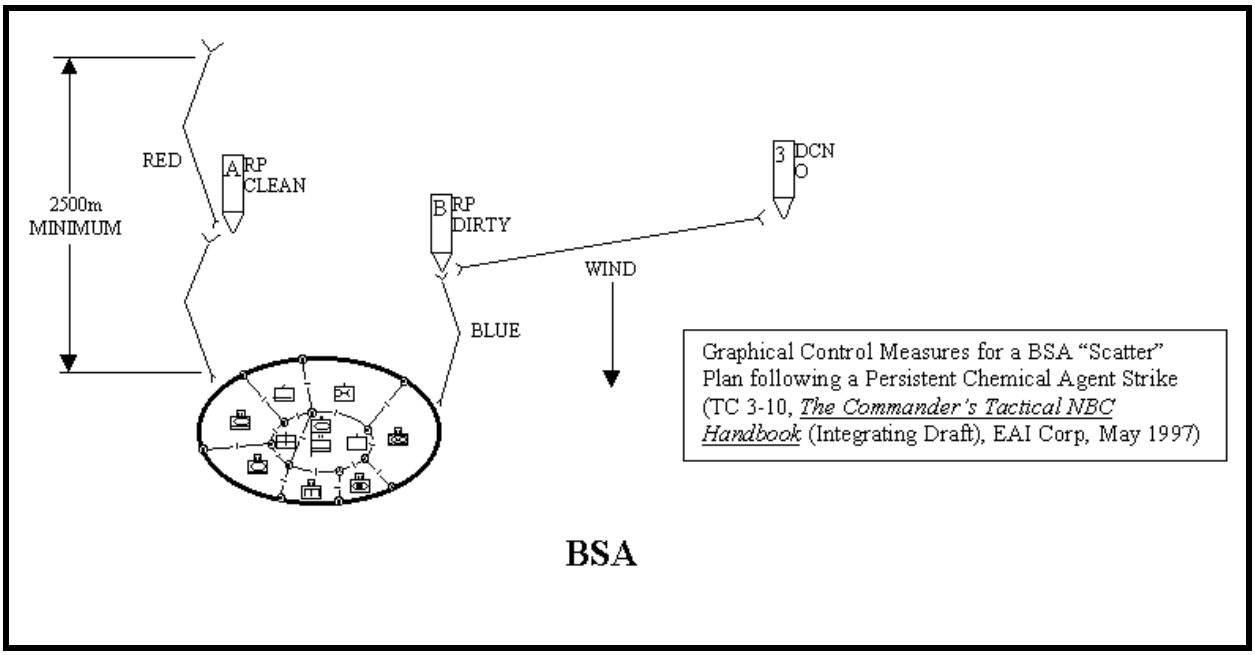


One of the more complex ADC missions that a BSA may face is in response to a persistent chemical strike. During the attack the BSA will not only be faced with finding and reporting casualties and equipment losses, but it will also coordinate steps to minimize the spread of toxic agents to otherwise non-contaminated personnel and equipment.

Typically, graphical control measures used to facilitate ADC C2 in response to a persistent chemical attack are ineffective. CSS graphics in the FSB TOC usually include a decontamination point and MSRs/ASRs, which could be designated as "dirty" in the event of a persistent agent attack. These graphics alone do not describe how to move soldiers from a contaminated portion of the perimeter to an area that is out of both the impact and the downwind hazard areas and on to the designated "dirty" MSR that leads to the operational decontamination point.

TECHNIQUE: The S4 should coordinate with the S2/S3 and FSB NBC NCO to add graphic control measures for tentative NBC clean and dirty rally points with corresponding routes to the brigade's MSRs and ASRs. This would improve the FSB's plan for response following a persistent agent attack (see above).

BOTTOM LINE: Any graphical control measures which aid in the execution of ADC functions following an attack are an important part of the BSA's ADC plan where speed of execution is critical.



Graphical Control Measures for a BSA "Scatter" Plan following a Persistent Chemical Agent Strike (TC 3-10, *The Commander's Tactical NBC Handbook* (Integrating Draft), EAI Corp, May 1997)

PREPARING

As with all military operations, rehearsals are also key to successful execution of the ADC plan. BSA tenant units must practice ADC tasks prior to actual execution.

Staff drills or checklists which standardize actions in response to an enemy attack or natural disaster will aid the CACP in executing its ADC role. Drills or checklists provide redundancy for any staff section or command post. If key leaders are not present when a situation occurs, the command post can still execute its mission by following a checklist or drill. The example of a staff drill on page 21 could be used by the CACP in response to an enemy persistent agent attack. The drill is based on operations within a CACP with five assigned soldiers -- S1, S4, S1 NCO, S4 NCO, and one RTO/Recorder.

This staff drill is not all inclusive; it is a model. You can add or delete steps or procedures based on your unit's tactical SOP. It illustrates the complexity of the steps involved in ADC planning and execution. A well-drilled CACP staff section with a set of staff drills like those in the example will have a plan that can be rapidly executed when "bad things" happen in the BSA.

CONCLUSION

Area damage control remains an important function for all CSS units. FSBs and habitual tenant units must standardize and rehearse their ADC responses to reduce the probability of damage and minimize the effects of hostile actions or natural or man-made disasters. The FSB S4 must use better graphical control measures and develop a standardized set-up for the BSA CACP to improve the BSA's ADC response. A unit's ability to support its customers and redeploy with all assigned soldiers depends on it.✪

CACP Battle Drill #XX – React to Chemical Attack with Persistent Agents (Provide area damage control to the BSA)	
ACTION	**RESPONSIBILITY**
1. Monitor/observe chemical alarm or report of chemical attack in or near BSA perimeter.	All CACP Personnel
2. Alert CACP to take appropriate actions (mask, MOPP IV, and close doors/flaps to CACP) if CACP is threatened.	S1/S4 or NCOIC
3. If NBC1 report is sent, plot attack location and downwind hazard.	S1/S4 Report taken over FM by Recorder
4. Receive casualty and damaged/destroyed equipment reports from BSA tenant units (primary DNVT, alt FM).	S1/S4 NCOICs Recorder
5. Alert operational decon and patient decon teams to assemble at designated rally points.	S1/S4
6. Recalculate CSS capabilities of BSA based on critical CSS assets and personnel identified in coordination with the SPO.	S1/S4
7. Provide unit effectiveness and ADC operations updates to the CDR and SPO.	S1/S4
8. Obtain locations for approved operational decon and patient decon sites and dirty/clean routes from the S2/S3 and dispatch teams.	S1/S4
9. Release tenant units to move to contaminated assets decon sites based on CDR's priority of decon.	S1/S4
10. Consolidate salvage and recovery team at designated rally point in preparation of support for BSA move.	S4
11. Supervise decon and salvage operations.	S1/S4
12. Coordinate with DISCOM for additional ADC requirements to include a thorough decon.	S4
13. Supervise execution contingency movement plan as part of BSA scatter plan.	S4
14. Maintain accountability of BSA personnel and equipment at new operating site based on unit closure reports.	S1/S4
15. Account for personnel and equipment as they return from operational and thorough decon.	S1/S4
16. Request resupply of NBC supplies and equipment expended during decon.	S4

Medical Evacuation: Clearing the Mechanized Battlefield

by CPT Steven Matson and SFC Betty Bennett

An analysis of CTC medical trends reveals a very common thread: the majority of died of wounds (DOWs) result from casualties who never make it into the evacuation system. That is to say, they are never cleared from the battlefield. Detailed planning and rehearsals start from the company's casualty collection point (CCP) and not the point of injury (POI). Non-standard evacuation assets are positioned at the battalion aid station (BAS) and the ambulance exchange point (AXP) where they usually sit idle because casualty evacuation (CASEVAC) from POI to the CCP has not been thoroughly planned, resourced, or rehearsed.

Reconnaissance Elements: One of the most difficult missions in combat health support (CHS) is the evacuation of scouts and combat observation and laser teams (COLTs). They operate far forward with unsecured evacuation routes and no organic medical support.

Successful evacuation requires integrated medical and tactical planning. Using scouts as the example, a typical CHS evacuation plan reads, "Company 'X' has area evacuation responsibility for the scouts." But what does that mean? It could mean anything from simply allowing the scouts to pass through the company's lines to sending a platoon-size element to facilitate the scout's withdrawal. The point is that very rarely are the parameters for the scout evacuation mission clearly defined and, therefore, very rarely rehearsed.

TECHNIQUE: One successful method is for the S3, medical, and scout platoon leaders to develop three contingency plans for scout evacuation based on the probability of enemy contact. The plans would be incorporated into the battalion TACSOP or playbook so that any company with the scout mission would support the scouts with minimal planning and maximum rehearsal time.

EXAMPLE of three effective contingencies:

1. When enemy contact is not likely or expected, send one ambulance, possibly with a C2 escort, to retrieve casualties resulting from accident or injury shortly after scout LD.

2. When contact is likely with dismounted enemy elements up to squad size, send one ambulance with a Bradley escort.

3. In the event scouts become compromised and face a significant threat, the ambulance accompanies a combat maneuver platoon to facilitate the extraction and evacuation of all scouts in the area.

NOTE: Medical planning for reconnaissance elements without the integration of tactical planners and executors has proven ineffective.

Maneuver Company: Planning for the evacuation of casualties from the maneuver platoons to the company CCP is the responsibility of the maneuver company XO; responsibility for execution of the evacuation lies with the First Sergeant. To remove injured soldiers from the battlefield, the 1SG uses the medic and mechanic tracks, as well as his own vehicle, as evacuation platforms. Unfortunately, all too often it is assumed that the 1SG's concern for the welfare of the troops is all that is needed to get soldiers from the POI to the CCP. First Sergeants do not receive sufficient evacuation assets or ample training time during STX lanes to rehearse and refine casualty evacuation. It is understandable that commanders do not want soldiers to lose valuable maneuver training time

because they are in the evacuation system. But evacuation by the 1SG from POI to the CCP should be trained with each iteration. Evacuation to the BAS or AXP can be done more sparingly. Remember, most died of wounds occur because soldiers never make it into the evacuation system.

TECHNIQUES: The following techniques will improve company CASEVAC:

- Weight the main effort with an additional medic team.
- Augment the 1SG with additional trucks based on casualty estimates.
- Train all personnel on extracting casualties from various vehicle compartments.
- Combat Lifesaver certify those personnel the 1SG uses for CASEVAC.
- Develop a vehicle marking system to quickly identify vehicles containing casualties.
- Incorporate CASEVAC to the CCP into all STX lanes.
- Try to designate easily identifiable terrain features or man-made objects close to the road as enroute CCPs during offensive operations.
- In the defense, identify and rehearse the safest route possible from each position to the CCP.
- In the defense, inspect weapons or serve chow at the CCP so soldiers can associate an event with the location.

Area Supported Units: These are units that are not organic to the maneuver battalion but still operate within the battalion sector. They receive support from the nearest medical unit (either the BAS or AXP), but are not supported directly with treatment or evacuation assets. Such units include field artillery, engineer, air defense artillery, and signal.

In most rotations a lack of situational awareness, both by the supported unit and the BAS or AXP, result in needless DOWs. The supported unit typically does not update its CSS graphics, nor do they verify the location of the nearest medical unit. BASs and AXPs do not keep abreast of units operating within their areas of responsibility. Two-way communications or route recons are not accomplished until casualties occur. As a result, during almost every rotation, artillery and engineer soldiers die within two to three kilometers of the BAS or brigade AXP.

TECHNIQUE: The cure is simple coordination and updated graphics.

Successful CASEVAC occurs when medical units plot and update the location of everyone operating in their area of responsibility. The supported units do the same with medical units on the battlefield. These units do not necessarily monitor each other's nets, but they do establish contact, exchange frequencies and call signs, conduct periodic radio checks, and update each other on current location and situation.

Conclusion: Effective casualty evacuation cannot be accomplished by merely assigning broad sweeping responsibilities in the Service Support paragraph of an OPORD. It must be the result of detailed and integrated planning between medical and tactical planners. It must be integrated into training and rehearsals. Above all, it must come from the desire and commitment of both medical and maneuver personnel to treat and evacuate casualties.✪

Maintenance Management in the DS Maintenance Company: "A Lost Art?"

by MAJ James Fly, SFC Jeffery Forster, and SFC Barbara Malone-Verduin

This article discusses observed trends and suggests techniques and procedures for improving maintenance management as defined in FM 9-43-1, Maintenance Operations and Procedures.

INTRODUCTION

Direct support (DS) maintenance companies overlook many areas of the maintenance management process as described in **FM 9-43-1, *Maintenance Operations and Procedures.*** DS maintenance companies often do not have SOPs. The absence of an external maintenance SOP causes ambiguity in the maintenance support system. It leads to a "fly-by-the-seat-of-your-pants" approach to maintenance operations in a brigade combat team (BCT). The key to successful maintenance management is to follow the guidelines laid out in Army doctrine.

On 21 February 1997 the Army Chief of Staff authorized the release of FM 9-43-1. This manual supersedes the previous maintenance series. It codifies current maintenance doctrine in a single, convenient source. FM 9-43-1 defines the maintenance management process in the following steps:

- √ Production Control
- √ Forecasting
- √ Scheduling
- √ Quality Assurance
- √ Technical Assistance
- √ Provisioning of Repair Parts
- √ Work Loading
- √ Developing Reparable Programs

By following this process and developing SOPs, a unit will greatly enhance its customer support; overlooking any of these areas will cause problems throughout a brigade's maintenance system.

PRODUCTION CONTROL

By definition, production control is the most important function of maintenance management. The maintenance control officer (MCO) is responsible to direct effective production control for the DS maintenance company. FM 9-43-1 highlights the following tasks for production control in a DS maintenance company:

- Production planning and scheduling.
- Proper routing and rerouting of work.
- Attaining maximum production by keeping all shop elements working near capacity.
- Proper shop layout to achieve time, motion, and movement economies.

Production control is more difficult in a field environment than in garrison. Environmental factors make repairs in a combat zone much more difficult than in a near-sterile maintenance bay. The bottom line, however, is that a DS maintenance company is designed to provide the same level of support in a field environment as in garrison. Some techniques to overcome the production control challenges in a field environment follow:

- Plan, train and resource lifting operations in a field environment.
  - Bring bracing materials to support transmission jacks.
  - Train soldiers assigned to the company's M88/M984/M936 to pull packs and lift turrets.
  - PCI and bring engine and turret stands to the field.
  - Practice using engine and turret stands in the field.

- PCI power generation and distribution systems.
  - Ensure proper output (voltage, hertz, amperage) to match requirements.
  - Develop a power distribution plan to ensure proper loading of generators.
  - Bring adequate grounding materials for all generators and shop sets/vans.

- Ensure you have the right tools for the job.
  - PCI shop sets and tool kits (obtain replacements for damaged or missing components).
  - Obtain and review a current vehicle density listing for your customers to ensure you have all of the special tools required.
  - Order and maintain expendable supplies to support maintenance operations.

- Plan for normal maintenance control section (MCS) operations no matter what happens.
  - Bring enough forms to operate manually if required.
  - Develop and PCI a communications plan with maintenance support teams (MSTs) to facilitate timely updates of work order status, customer maintenance trends, etc.

The MCO often concentrates on combat power until a red flag is raised for a particular reparable commodity.

RESULTS:

1. Loss of focus on which non-combat systems are inoperable at the organizational level (LRUs, radios).
2. Increasing backlog toward the end of a rotation.
3. Recovery from a field training exercise or a deployment should not entail recovery from an increased backlog from inadequate production control while deployed.

TECHNIQUES: DS maintenance companies should train to support in a combat environment.

- The MCO should focus on controlling production for all of his shops while deployed.
- All shop sections should update their open work order status daily and effectively manage their production while deployed.

FORECASTING

Forecasting within the DS maintenance company means anticipating future workload. Anticipation of required repair parts, special tools/equipment, and mechanics to complete forecasted work orders is key to maintaining the operational readiness of the customers. The MCO accomplishes forecasting at several different levels.

1. The MST team chiefs play a key role in forecasting by providing vital information to the MCS. If the MST team chief attends the task force maintenance meetings and interfaces with the supported unit's battalion maintenance officer (BMO) and battalion maintenance technician (BMT), he will gain a good understanding of the maintenance trends and equipment status of the supported unit. The ability of the MST to communicate the customer's maintenance requirements to the MCS on a daily basis allows the MCO to make better production control decisions through forecasting.

2. The MCO uses customer maintenance requirements to anticipate and reduce maintenance turnaround time to the brigade combat team. Updates from the DS maintenance company's shop sections and MSTs are critical input to SAMS-1 and SAMS-2.

3. SAMS is a key enabler which allows maintenance managers at the maintenance company MCS, FSB support operations section (SPO), and the Division Material Management Center (DMMC) to manage the movement of repair parts and track maintenance trends. ***If the maintenance company's shop sections and MSTs do not update the SAMS-1 work order status daily, these maintenance managers are unable to forecast.***

SCHEDULING

Scheduled maintenance for a DS maintenance company includes semi-annual and annual services, TOW missile verifications, weapons bore-scoping/gauging, and night-vision device purging/focus checks. Services are scheduled for an entire fiscal year based on the customer's training calendar. Many organizational-level units surge scheduled services prior to a training rotation or deployment by forcing both the service schedule for the rotation and those regularly scheduled into the same thirty-day time period. This surging of services creates unforecasted demands on the DS maintenance company's workload and the repair parts system.

RESULTS:

1. An increase in the number of zero balance organizational prescribed load list (PLL) lines. PLL replenishments are often accomplished toward the end of rotations or weeks into a deployment.
2. Most units are unable to keep starters and generators and other LRUs on their PLLs.
3. The operational readiness rate for the brigade combat team (BCT) suffers.
4. Valuable training time is lost because combat vehicles are frequently deadlined for problems that require repair parts.

TECHNIQUES which can be used to minimize the effects of customer unit surging of services:

- Provide technical assistance to organizational-level units while equipment is in service. DS mechanics/technicians can provide technical assistance to the troubleshooting efforts of the organizational mechanics and greatly reduce the use of unneeded repair parts.
- Locate the armament and missile shops onsite with the Direct Support Electronic Test System (DSETS) and TOW II Test Set to reduce turnaround time for LRUs.
- Work with organizational units to identify which critical repair parts are zero balance, and expedite the turnaround of reparable parts that are repaired at DS.

When customer units surge services, they affect the maintenance system within the BCT. They create unforseen requirements on the maintenance resources of man-hours and repair parts. The MCO must become proactive when customers place unscheduled demands on the brigade's maintenance system.

QUALITY ASSURANCE

Quality assurance (QA) can determine the success or failure of a DS maintenance company. FM 9-43-1 states that an effective QA program is essential to the proper and effective performance of the DS maintenance company's mission. It covers all actions necessary to provide adequate confidence that materiel, data supplies, and services conform to established technical requirements for achieving satisfactory performance.

Maintenance company inspectors are assigned to the MCS for inspections of automotive, engineer, generator, and communications/electronic equipment. Although assigned to the MCS and responsive to their immediate supervisors and MCOs, they are responsible to the company commander. The company commander must ensure that these inspectors are qualified individuals who can work independently without shop influence to ensure quality standards are met.

RESULTS of substandard technical inspections:

1. Wasted man-hours.
2. Additional equipment downtime.
3. Lost customer confidence.

TECHNIQUES for an effective QA program that ensures maintenance is done correctly the first time:

- Everyone on the ground cannot be an inspector.
- During onsite maintenance operations (MST operations), QA procedures still apply.
- Each maintenance company MST should maintain a current technical manual library.
- Each MST should develop a system where either the MST team chief or the shop foreman checks the MST's work.

TECHNICAL ASSISTANCE

A DS maintenance company's technical assistance program can improve a customer's operational readiness. It can also assist the MCO in forecasting DS workload. Technical assistance within a maintenance company normally consists of helping a customer unit troubleshoot a mechanical failure in a piece of equipment.

MSTs are often reluctant to provide technical assistance to units they support. Typically, they just sit and wait for the organizational unit to become overwhelmed at the unit maintenance collection point (UMCP) before they offer assistance. Support units often look at this type of support as doing someone else's job for them.

RESULTS: MSTs that do not offer proactive technical assistance.

1. Ability to provide effective support is reduced.
2. The MCO is unable to forecast maintenance within the BCT.

TECHNIQUES:

- Units should take every opportunity to proactively provide and document technical assistance to their customers.
- Work ordering technical assistance jobs provides data to SAMS-1 which, in turn, provides feedback to identify maintenance trends.

PROVISIONING OF REPAIR PARTS

One way the DS maintenance company resources its mechanics to complete work orders is by provisioning repair parts. The MCS is responsible for the provisioning of repair parts through the following techniques:

- √ Standard Army Retail Supply System (SARSS)
- √ Cannibalization
- √ Fabrication
- √ Controlled Exchange
- √ Local Purchase

The support operations section, in coordination with DISCOM, plans the Class IX repair parts system to support a deployment or mission. A recurring observation is that a unit's plan for provisioning of repair parts starts out on paper as a workable system, but crisis management usually derails the plan. Well-intentioned leaders from echelons above the DS maintenance company switch to reliance on the "sneaker net" or "high-priority call-ins" to obtain the majority of required Class IX.

RESULTS:

1. MCSs often cannot track parts needed for job orders because they lose visibility of repair parts on order.
2. Waiting to pass national stock numbers (NSNs) at maintenance meetings for non-mission capable equipment prolongs the repair cycle.
3. The DS maintenance company ignores the system that already exists.
4. The DS maintenance company often bypasses the MCS completely.

TECHNIQUES for a more effective system:

- Ensure that all required DS repair parts are on order by the MCS prior to the brigade maintenance meeting.
- The MCO should work with the SPO before the maintenance meeting to identify which document numbers require expediting through DMMC.
- The maintenance meeting should serve as a means to confirm status of requisitions and record new requirements by exception only.
- The MCS should ensure that the status for all DS jobs are current in SAMS-2 prior to the BCT's maintenance meeting.
- DS maintenance companies can assist the supply company in the distribution of Class IX repair parts by ensuring repair parts are picked up daily and that unserviceable recoverables are promptly turned in.
- Any actions the MCS can take to streamline the turn-in process will greatly improve the Class IX flow to the BCT as well as improve operational readiness.

WORKLOADING

The process of efficiently managing the man-hours available to the maintenance company, or workloading, is a key component to production control. FM 9-43-1 defines workload analysis (workloading) for a maintenance company as part of the overall production control process. Workload analysis is continuous. It is aided by the use of automated SAMS output.

The MCO uses workload analysis to manage maintenance priorities. The MCO analyzes workload by interpreting SAMS-1 output data, attending maintenance meetings, and working with the SPO shop. The MCO must ensure that work is distributed to all assigned repair sections to keep them working at or near capacity. Effective workloading is accomplished by carefully distributing assigned work to minimize the backlog in any particular shop section.

As part of the workload analysis, the MCO must plan and support the security requirements for the DS maintenance company. The MCO should advise the commander on how to balance competing man-hours requirements to ensure the company can meet its maintenance mission. It is up to the company commander to make the final decision on when to sacrifice company security in favor of the DS maintenance mission (Assume Tactical Risk).

TECHNIQUES: FM 9-43-1 suggests the following techniques for minimizing the effects of security requirements on workloading:

- Select a good defensive position; the better the position for security, the fewer the soldiers (man-hours) required to secure it.
- Collocate with other units to share security requirements.
- Coordinate guard rosters with repair section leaders; give section leaders a soldier requirement rather than arbitrarily running a Duty Roster (DA Form 6) using an Alpha Roster.
- Request augmentation of security force personnel when security requirements seriously reduce man-hours available and backlog suffers for an extended period.

The MCO may suggest that overloaded sections provide fewer personnel for security requirements until they catch up. The MCO must assess the workload and capabilities of each shop section to prevent over commitment. This enables the MCO to make sound decisions on how to best support the customer without sacrificing security for the company.

DEVELOPING REPARABLE PROGRAMS

Maintenance companies generally have little input to the actual composition of a division's reparable exchange (RX) listing. However, they do have the ability to manage and control the components turned in to their bench shop sections for repair. Reparable programs are designed to fit the needs of the customer. One commonly occurring problem with RX programs is that reparable parts turned in to the Supply Support Activity (SSA) are incomplete.

RESULT: When items are turned in without critical components, they are frequently classified as not reparable at this station (NRTS).

TECHNIQUES:

- Make certain customers understand the standards for turn-in of reparables to the SSA.
- Make certain the maintenance sections that repair RX parts work closely with the supporting SSA. The maintenance sections should check with the SSA RX section at least daily to troubleshoot turn-in problems and minimize surging of work orders into maintenance shops.
- Ensure the proper care and shipment of reparables to increase operational readiness by making more RX parts available to fix the supported unit's equipment.

CONCLUSION

DS-level maintenance management success is determined by how well maintenance companies support their customers and how quickly repaired equipment is returned to the fight. Army field manuals and regulations outline how maintenance companies do business. Using these manuals and implementing clear maintenance SOPs will increase operational readiness and customer confidence in the maintenance company's ability to support. The supported units are more than willing to comply with SOPs as long as maintenance companies enforce them, deliver high-quality service, and provide responsive support. The maintenance management process defined in FM 9-43-1 is the key for providing the top-quality support customers deserve.✪

FORWARD LOGISTICS ELEMENT (FLE)

by MAJ Jim Gaffney

This article clearly defines an FLE and provides information for planning the employment of an FLE.

What is a forward logistics element (FLE)? Ask anyone this question. I'll bet you get a different answer every time. The lack of a common understanding of an FLE hampers logistics planners' and executors' efforts to properly plan and employ an FLE on the battlefield. Units use the term to describe everything from the normal echelonment of the FSB/BSA assets forward to an FSB (-) in the brigade rear area. They even use it to refer to the positioning of logistic assets midway between the BSA and the forward line of own troops (FLOT) of a brigade's area of operation.

To answer this question correctly, you need more than an understanding of the definition. You have to understand the description as well. The following examples illustrate this.

Example 1:

The brigade XO arrives at the FLE's location. He tells an O/C: "I am here to find out about this FLE. I don't know what it is, what it does, or why it's located here. So what can you tell me?"

Example 2:

In operations, when the combat arms soldier is asked what comes to mind when someone says "movement to contact," he can quickly form a very clear mental picture. He immediately knows that it is a form of the offense: You are not in contact with the enemy and the most likely movement technique in conducting this type of mission is traveling overwatch.

The first example demonstrates how important a definition is. Yet it is incomplete without the word picture description in Example 2. It illustrates how the military vernacular paints very specific word pictures. The word pictures serve as a common departure point for conducting military business. It does not matter whether a soldier is in the combat arms, combat service support, or combat support profession. As commanders and staffs attempt to communicate instructions to subordinates, the improper use of operational terms often creates misunderstanding.

Doctrine

FM 101-5-1, *Operational Terms and Graphics,* defines a **forward logistics element** as:

> *A multifunctional forward logistics element task-organized to support fast moving offensive operations, early phases of contingency operations, and units geographically separated from the normal support channels.*

But as we have already seen, the definition is only part of the equation. **FM 100-10, *Combat Service Support,*** describes the FLE. The key words FM 100-10 uses are ***critical capabilities*** and ***located near supported unit*** when ***fast paced operations*** or ***security considerations extended distances between the BSA and supported unit.*** You must consider this description in conjunction with the definition from FM 101-5-1 when planning an FLE.

Grasping the concept of an FLE to get a clear word picture begins and ends with FM 101-5-1. You must understand the meaning of the phrase task organized:

1. A temporary grouping of forces designed to accomplish a specific mission.

2. The process of allocating available assets to subordinate commanders and establishing/determining their command and support relations.

Does this call to mind a formalized command and control structure with a specific mission?

When you tie this all together, the word picture for an FLE looks like this:

- A company commander from the FSB leading a CSS element.
- A multifunctional CSS unit.
- Element performing more than one critical logistics function for a specified time and mission.
- Located close to the supported unit.
- Working for the BDE, FSB, or TF commander.

Observation

The most commonly observed trends are listed below. Almost all units experience these difficulties.

ISSUE: FSBs generally do not integrate the planning and execution of an FLE into the brigade operation.

PROBLEM: FSBs are not directly involved in the brigade's MDMP.

RESULTS:

1. No clear task and purpose for the FLE.
2. Undefined command relationship for C2 and FLE CSS operations.
3. FLE location not represented on the brigade's maneuver and CSS graphics.
4. BDE TOC unaware of the FLE's location or disposition.

In most units the battalion TACSOP delineates the use and composition of an FLE. The FSB staff uses this as a "cookie cutter" approach to conducting FLE operations. It is an easy way to reduce decision-making and mission planning when employing an FLE. The FSB's decision to employ an FLE is not based on doctrine. The battalion does not conduct any formalized planning process, and the FSB S2/S3 and SPO do not perform any detailed planning to define the mission requirements in terms of the FSB's capabilities.

So, what happens? A portion of the FSB's assets, personnel, and equipment are forward of the BSA with an unclear mission statement, fending for themselves. These elements cannot properly conduct life support operations nor defend themselves.

Why? No specified or implied tasks were developed for the FLE. Consequently, a troop to task was not done to ensure there are enough soldiers to perform the mission.

The keystone to making an FLE successful is having enough soldiers on the ground to perform the logistics mission, and to sustain and defend themselves while they are located closer to the FLOT.

TECHNIQUES for successful FLE operations:

- FLE requires a specific mission for a specific period of time.
- Tailor FLE operations and associated CSS functions to the BCT's mission.
- Plan how to use the DS logistics assets.
- Bring only the CSS functions the mission requires.
- Staff the FLE C2 node with enough soldiers to operate the CP for 24-hour operations.
- Ensure CP operations are prepared to maintain situational awareness of the enemy, friendly and logistics fight.
- Bring sufficient communications equipment to conduct the mission.
- Analyze the threat and bring the right firepower.
- Bring sufficient soldiers to perform life support and force protection requirements.
- Assign sufficient NCOs to the FLE to perform the CSS missions.
- Assign a Field 1SG who knows how to take care of soldiers and enforce standards.
- Bring sufficient equipment to sustain the FLE for life support (tents, stoves, Class I operations, internal maintenance, and medical).
- Conduct troop-leading procedures and rehearsals; develop priorities of work or enforce standards.
- Develop battle drills (air defense, NBC, ADC, medical evac).
- Develop a defensive plan for the forward logistics base.

Conclusion

FLE operations are an essential element to CSS support of a BCT. The FLE is responsive. It provides continuous logistics support custom tailored to the BCT's needs. The command and control node enables the FLE to maintain the fight with time on target. Composition and function of the node sets the conditions for success or failure. The criteria for employing an FLE must include security, but the distance exceeded or extended beyond the normal capability of the DS and the organizational CSS assets of the supported brigade must also be considered. Finally, all DS logisticians should review page 8-20 in **FM 71-3,** ***The Armored and Mechanized Infantry Brigade,*** to gain an understanding of how the Killers view their support.✪

A Defense Cookbook for the Logistician

by MAJ Paul Butler and SFC Clara Rutherford

The purpose of this article is to give CSS leaders a "bare bones" practical guide for establishing a defense. It is a very basic reference for people who need a quick "how to" on rear area tactics. After years of experience as O/Cs, we have seen far too many leaders who need a refresher course on the fundamentals. This guide is for them.

WEAPONS

Many leaders do not realize what their weapons can realistically accomplish. Anyone who expects one soldier with just an M-16 to stop an OPFOR squad is making a big mistake.

M-16 Rifle: Kills individual soldiers out to 550 meters. Do not waste your ammo shooting tanks or BMPs (a Threat fighting vehicle [Soviet]). The M-16 is an individual weapon. It should not be the only weapon defending your perimeter.

M249 SAW: Kills small groups of soldiers out to 1100 meters. It is a heavier version of the M-16. It can be used on the perimeter as long as the only thing you expect is a few infantry.

M-60 Machine Gun: Kills groups of soldiers out to 1100 meters. A good weapon for your perimeter, as long as the only enemy you expect is infantry. Also kills helicopters -- if you fire numerous rounds.

M-2 Machine Gun: Kills large groups of soldiers and lightly armored vehicles out to 1600 meters. Your best machine gun. It should be your first choice for perimeter defense. The only automatic weapon that is effective against BTRs (a Threat vehicle [Soviet]) and BRDMs (a Threat scout car [Soviet]). It can also be a decent anti-aircraft weapon when it is mounted on truck ring mount.

M203 Grenade Launcher: Indirect fire: Used to drop explosives in places enemy soldiers are hiding (ditches, gullies, behind concrete walls, through windows and doors, any place that you cannot reach with a bullet). For point targets (windows, doorways) no more than 150 meters. For area targets you can be up to 350 meters away.

Hand Grenade: Useful for clearing rooms or when the enemy is very close; also useful when you want to stay hidden, especially at night. (No muzzle flash or gunshot to show where you are.)

AT-4 Rocket Launcher: When fired in groups (volley fire) it will kill light-armored vehicles (BMPs, BTRs, M113s) out to 400 meters. Tanks are so heavily armored it is almost impossible to kill one with this weapon. If you are engaging a tank, try to shoot from above (second-story window, cliff top) into the thinner top armor, or directly from behind at its rear armor. It is also useful against bunkers and fighting positions.

Claymore Mine: Kills small groups of soldiers, on command, out to 100 meters. Imagine a giant shotgun.

M-15/21 Mine: Kills or immobilizes tanks, but only if they roll directly over it.

NECESSARY SKILLS

Here is a recommended list of the skills needed to establish an effective defense. If you have not tested the ability of your soldiers and leaders to perform these tasks, you have no idea of their proficiency. Platoon and squad situational training exercises (STX) during Sergeant's Time are great ways to assess these tasks and train them to standard.

Soldier skills have been divided into two levels. This reduces the number of skills a soldier has to learn upon arrival in a new unit. Basic soldier skills are for soldiers who have no field experience; advanced soldier skills are for soldiers who have been to the field at least once.

The Private: Basic Soldier Skills

Dig a hasty fighting position.
Lay concertina: triple strand with stakes.
Guard duty.
Fire M16 or SAW.
Use night-vision goggles (NVGs).

The Specialist: Advanced Soldier Skills

Fire M60 or M2.
Dig a M60 or M2 position.
Prepare a range card.
Fire crew-served weapons with night sight.
Fire AT-4.
Advanced concertina wire: harassment wire, tangle-foot.
Place trip flares and field expedient warning devices.

The Squad Leader: Organizing the CSS squad for combat

Squad sector sketch.
Supervise fighting position construction: enforce standards.
Performs the pre-combat inspection (PCI) of the soldiers. The PCI should include weapons, ammunition, water, batteries, NBC gear, NVGs, and commo equipment.

The Platoon Leader and Platoon Sergeant: Organizing the CSS platoon for combat

Assign squad sectors.
Position crew-served weapons: platoon leader (PL) says where to place and what direction is the sector of fire; platoon sergeant (PSG) makes it happen.
Direct the placement of the wire: PL says where; PSG makes it happen.
Position AT-4s at areas likely to see enemy vehicles.
Complete the platoon sector sketch: PL responsibility.
PSG conducts PCI of the crew-served and anti-armor weapons. Check for: range card, M2 headspace and timing gauges, batteries, tools, cleaning kit, weapon cleanliness.
Directs the emplacement of trip flares and other warning devices.

The Company Commander and First Sergeant: Organizing the CSS company for combat

Assign platoon sectors.
Company command post (CP): radios, telephone, mobile subscriber radio telephone (MSRT), maps.
Position air defense assets: Stinger team, M2 on a vehicle ring mount.
Complete the company sector sketch.
Inspect crew-served weapons and their positions.
Direct company internal reaction force (IRF).
Call for mortar and artillery fire.

THE TOP FIFTEEN MISTAKES

Listed below are the most common errors that have been observed by O/Cs. Companies continue to repeat them. If you get a good laugh, think about your last FTX . . . and which of these errors you made!

1. MILES gear. We have seen soldiers fire complete belts of ammunition at OPFOR soldiers without alerting or keying a sensor.

TECHNIQUE: Zero MILES gear.

2. Sectors of fire. It does not matter how big you draw the sector of fire on your map. The tripod of an M60 only swings across a 50-degree arc. Likewise, assigning guards huge areas to cover, forcing them to swing their heads back and forth like a radar dish, will only last ten minutes. After that they will just stare straight ahead, occasionally glancing to their left and right.

TECHNIQUE: Use this habit to your advantage. Place guards to the sides of their sectors and have them look along the perimeter. In this manner, their entire sector becomes one narrow field of view, which makes it easy to observe and easy to fire upon.

3. Rehearsals. When the OPFOR is at the wire is not the time to figure out your response. Reaction forces need to be organized, with set rally points, sketches of the area, and radios. When you are facing a mounted OPFOR, planning is even more important. MPs and mounted IRFs racing to catch OPFOR vehicles are sure to die. The OPFOR is too good. You cannot play "catch up" against them.

TECHNIQUE: Move to ambush points and shoot the OPFOR as they come by.

4. Qualified gunners. The greatest strength of the OPFOR is their speed. You have only seconds to beat the OPFOR. If your only qualified M2 gunner is at work five minutes away from the M2 position, he will get there 4 minutes and 30 seconds too late to do any good.

TECHNIQUE: USAREUR requires units to have two qualified gunners for every crew-served weapon. **We recommend three.**

5. Wire. Units often place wire in areas where guards cannot view the wire. Units are wasting wire if they use this method. Moreover, wire never stops the OPFOR. Concertina wire only slows down the OPFOR so you can get a better sight picture as you squeeze the trigger.

TECHNIQUE: Do not count on wire to protect you.

6. Weapons' test firing. If you do not fire the weapon, how do you know it works? A bad time to learn that the blank adapter is loose is when OPFOR soldiers are cutting through the wire.

TECHNIQUE: Fire two six-round bursts. If a machine gun is going to jam at all, it will usually jam after the first burst.

7. Weapons' zeroing. This has been emphasized previously. You cannot destroy what you cannot hit. The fundamentals of marksmanship still apply. In firefights soldiers love to fire from the hip, then complain because none of the OPFOR are killed. When was the last time you saw anyone qualify on a M16 range while firing from the hip?

TECHNIQUES: Zero your weapon. Fire from appropriate firing position.

8. NVGs. We have seen many soldiers wear NVGs around their necks; however, few soldiers use them. If those NVGs are not in front of their eyes, they are not in use. As force size diminishes, we have to use technology to our advantage.

TECHNIQUE: We have the equipment to own the night; USE it!

9. Placing positions. Improper soldier positioning can produce common errors. A location that seems to have wonderful fields of view is often completely different when you are in a foxhole.

TECHNIQUE: When you are placing positions, ***get down on your stomach and look again*.** This is what the soldier will actually see.

10. Oversize fighting positions. The bigger a fighting position, the more difficult it is to emplace overhead cover. It is commonly referred to as the "Jacuzzi Syndrome" when soldiers dig huge holes. When soldiers start piling sandbags on top of the Jacuzzi-size holes, the overhead starts to sag on the first layer, let alone the third layer of sandbags.

TECHNIQUE: A good position is a tight fit--only two helmets wide by two M-16s deep. It is really easy to emplace overhead cover.

11. Fields of fire. If everyone faces straight out, you need a lot of positions to fully cover an area.

TECHNIQUE: One position, ***placed to one side and oriented along your perimeter,*** can cover a lot of ground.

12. Force protection. How many CPs and TOCs have you seen with a bunker or hasty position close by? Many officers and NCOs have been seen standing up and continuing to work in the TOC as the artillery comes in or the OPFOR raid has reached the "tents with all the antennas around them."

TECHNIQUE: Ensure there is a fortified position easily accessible to TOC and CP personnel.

13. Roving patrols versus guard posts. A patrol that moves along your perimeter does not guard your perimeter; it guards a portion of your perimeter for a short period, then it guards another portion. The remainder of the perimeter is not protected. The OPFOR does not casually stroll into your perimeter. They sit outside it for hours, day and night, watching. They will spot the weak points. The OPFOR will time patrols.

TECHNIQUE: Post static guards (see number 11).

14. Combat operations. Thousands of soldiers on peace support operations must be re-trained before they engage in combat. Common habits include using white lights freely, parking hub to hub, and an extreme reluctance to fire on the enemy. A typical problem develops when a guard sees someone cutting through the perimeter wire. By the time the guard finishes calling the CP and requesting instructions, the OPFOR are inside the perimeter.

TECHNIQUE: Train tactical force protection at Home Station.

15. Zero weapons. Guards cannot stop the OPFOR if they cannot kill the OPFOR. Conducting proper weapons' zeroing is constantly taught because soldiers continue to fire numerous rounds yet few OPFOR are killed.

TECHNIQUE: See numbers 1 and 7.

CHECKLIST FOR A SOLID COMPANY DEFENSE

- √ One hundred percent of the perimeter is covered by observation and fire from M60 and M2 machineguns.
- √ One hundred percent of the perimeter is wired in.
- √ Crew-served weapons are dug in.
- √ All crew-served weapons have been test fired.
- √ AT-4s are on the perimeter, loaded and keyed.
- √ CP has FM commo to battalion TOC, platoons, perimeter, and the company IRF.
- √ CP has wire commo to battalion TOC, platoons, and the perimeter.
- √ CP has sketch of company perimeter, map of BSA, and 1:50,000 map of immediate area.
- √ CP has a bunker, with commo and maps.
- √ IRF has (at least): one machinegun, one AT-4, commo to the CP, and map of company area.
- √ IRF has rehearsed.
- √ Company stretcher teams are organized and have rehearsed.
- √ Combat lifesavers have their bags with them and the bags are fully stocked.
- √ Company medical evacuation vehicle is ready (empty of what it normally carries).
- √ Everyone has a hasty position, including the CP and IRF soldiers.

STAND TO

Most rear area units conduct Stand To. It normally starts just before sunrise and lasts 30 to 45 minutes. The exact standards vary, but they usually include 100-percent manning of the perimeter and shutting down the generators. Units always include 45 minutes of soldiers lying in the mud and doing nothing.

TECHNIQUE: Use Stand To as a daily rehearsal of the BSA defense plan. Exercise every BSA asset. It is possible to rehearse internal reaction forces, MPs, casualty collection, NBC testing, and mass casualty plans ***every day,*** greatly speeding the response time for all BSA assets. Rehearsals also highlight flaws in defense plans.

REFERENCES

Following are some handy manuals to have for planning your defense; an asterisk denotes the top four.

- ***Soldier's Manual of Common Tasks****
- ***Soldier's Manual of Common Tasks, Skill Level Two through Four****
- **FM 5-103,** ***Survivability***
- **FM 7-8,** ***Infantry Rifle Platoon***
- **FM 7-10,** ***Infantry Rifle Company***
- **FM 19-4,** ***Military Police Operations****
- **FM 21-75,** ***Combat Skills of the Soldier****

CONCLUSION

Over the last few years we have seen several units that were quite defensive about their lack of defensive skills. Whether their rationalizations were based on experiences in DESERT STORM or Bosnia does not matter. They just did not believe they would ever be in a situation where someone would be trying very hard to kill them. Remember Vietnam and Korea--U.S. logistics units were overrun.

EXAMPLE: In 1994 the Russians attacked Grozny, the Chechen capital, as part of their campaign to stop the breakaway republic. The Russians had massive problems with the Chechens' deliberate targeting of logistic units. The Russian logisticians were so inept at defense that, not only were Russian infantry units pulled back from the front to guard these units, but also many additional infantrymen were pulled out to fill in the unit vacancies.

RESULT: Logistic units had taken so many casualties, they were completely unable to accomplish their mission!

Yes, the Army logistics community is strung out. Yes, we are supporting operations all over the globe. But do we need the logistic equivalent of Task Force Smith before we start taking defense seriously?✪

GLOSSARY

ADC	area damage control
AOR	area of responsibility
ARTEP	Army Training and Evaluation Program
ASP	ammunition supply point
ASR	alternate supply route
AXP	ambulance exchange point
BAS	battalion aid station
BCT	brigade combat team
BDE	brigade
BMO	battalion maintenance officer
BMP	a Threat fighting vehicle (Soviet)
BMT	battalion maintenance technician
BRDM	a Threat scout car (Soviet)
BSA	brigade support area
BTR	a Threat vehicle (Soviet)
C2	command and control
CA	civil affairs
CACP	Control and Assessment Control Post
CASEVAC	casualty evacuation
CAT	control and assessment team
CCIR	commander's critical information requirements
CCP	casualty collection point
CHS	combat health support
COLTs	combat observation and laser team
CP	command post
CSS	combat service support
CTC	Combat Training Center
DECON	decontamination
DISCOM	Division Support Command
DMMC	Division Materiel Management Center
DOW	died of wounds
DS	direct support
DSETS	Direct Support Electronic Test System
EOD	explosive ordnance disposal

FC	Field Circular
FLE	forward logistics element
FLOT	forward line of own troops
FM	Field Manual
FMC	fully mission capable
FSB	forward support battalion
FTCP	field trains command post
FTX	field training exercise
HEMTT	heavy expanded mobility tactical truck
HHD	headquarters and headquarters detachment
HIC	high-intensity conflict
IAW	in accordance with
IPB	intelligence preparation of the battlefield
IRF	internal reaction force
LD	line of departure
LOGPACS	logistics packages
LRU	line replaceable unit
MASCAL	mass casualty
MCO	maintenance control officer
MCS	maneuver control system
MDMP	military decision-making process
MEDEVAC	medical evacuation
MHE	material handling equipment
MILVANS	military vans
MP	Military Police
MSB	military support battalion
MSR	main supply route
MSRT	mobile subscriber radio telephone
MST	maintenance support team
NBC	nuclear, biological and chemical
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NSN	national stock number
NVG	night-vision goggle
O/C	observer/controller
OPFOR	opposing forces
OPSEC	operations security

PCI	pre-combat inspection
PL	platoon leader
PLL	prescribed load list
PLS	palletized loading system
POI	point of injury
PSG	platoon sergeant
QA	quality assurance
RTO	radio telephone operator
RX	reparable exchange
SAMS	Standard Army Maintenance System
SARSS	Standard Army Retail Supply System
SAW	squad automatic weapon
SOP	standing operating procedures
SPO	support operations officer
SSA	supply support activity
STX	situational training exercise
TACSOP	tactical standing operating procedures
TF	task force
TOC	tactical operations center
TOW	tube-launched, optically tracked, wire-guided
TSO	transportation supply officer
TTP	tactics, techniques and procedures
ULLS	unit level logistics system
UMCP	unit maintenance collection point
USAREUR	United States Army Europe